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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,735	12/16/2004	Thomas Busse	884A.0063.U1(US)	1332
29683 7590 01/29/2007 HARRINGTON & SMITH, PC 4 RESEARCH DRIVE SHELTON, CT 06484-6212			EXAMINER LU, ZHIYU	
			ART UNIT 2618	PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/518,735

Applicant(s)

BUSSE, THOMAS

Examiner

Zhiyu Lu

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16, 18-20 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16, 18-20 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-16, 18-20 and 22 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 18 recites the limitation "the transfer process" and "the transfer" in lines 4 and 6-7 of the claim. There is insufficient antecedent basis for this limitation in the claim.

According to lines 3-4, "... the device is capable of performing a first function where there is an inherent delay in the transfer process..." which seems to the Examiner that the transfer is part of the first function. But in the rest of the claim "... detecting the initiation of user input and then immediately initiating of the transfer; detecting the completion of the user input and performing the first function" shows that the first function is after the transfer. The meaning of this claim becomes indefinite. For examining purpose, the Examiner is taking the transfer as a process from first mode to second mode.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 5-8, 16, 18-20 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Barrus et al. (US Patent#5410305).

Regarding claim 1, Barrus et al. anticipate a device (keyboard) having a first mode (sleep mode) in which the device does not perform a first function and a second mode (active mode) in which the device does perform the first function (stores and transmits) wherein the device has a touch-entry user input device for user input and is arranged, when in the first mode, to initiate exit (wakes up) from the first mode and entry into the second mode at the initiation of a user input and to perform the first function at the completion of the user input (column 10 lines 31-57).

Regarding claim 18, Barrus et al. anticipate a method of transferring a user input device (keyboard), in response to user input, from a first mode (sleep mode) in which the device is not capable of performing a first function to a second mode (active mode) in which the device is capable of performing a first function (stores and transmits) where there is an inherent delay in the transfer process, comprising the steps of:

detecting the initiation of user input and then immediately initiating the transfer (column 10 lines 31-41);

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detecting the completion of the user input and performing the first function (column 10 lines 31-57).

Regarding claim 22, Barrus et al. anticipate a touch-entry user input device (keyboard) having a first mode (sleep mode) in which the device does not perform a first function and a second mode (active mode) in which the device does perform the first function (stores and transmits) wherein the device has means for user input and is arranged, when in the first mode, to initiate exit (wakes up) from the first mode and entry into the second mode at the initiation of a user input and to perform the first function at the completion of the user input (column 10 lines 31-57).

Regarding claim 2, Barrus et al. anticipate the limitation of claim 1.

Barrus et al. also anticipate comprising a processor (microcontroller) for detecting the initiation of a user input and a processor (microcontroller) for initiating the exit from the first mode (column 10 lines 36-39).

Regarding claim 3, Barrus et al. anticipate the limitation of claim 1.

Barrus et al. also anticipate the first mode is an energy conservation mode (sleep mode).

Regarding claims 5 and 19, Barrus et al. anticipate the limitations of claims 1 and 18.

Barrus et al. also anticipate wherein user input is performed by depressing a user depressible key (keyboard input).

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Regarding claims 6 and 20, Barrus et al. anticipate the limitations of claims 5 and 19.

Barrus et al. also anticipate further comprising the step of discriminating an instantaneous depression of the key from a continuous depression of the key (column 12 line 56 to column 13 line 19).

Regarding claim 7, Barrus et al. anticipate the limitation of claim 1.

Barrus et al. also anticipate the initiation of the exit from the first mode occurs before discrimination of the user input (column 10 lines 39-41).

Regarding claim 8, Barrus et al. anticipate the limitation of claim 1.

Barrus et al. also anticipate the entry into the second mode occurs before discrimination of the user input (column 10 lines 39-41).

Regarding claim 16, Barrus et al. anticipate the limitation of claim 1.

Barrus et al. also anticipate wherein the time taken to exit from the first mode and enter into the second mode is less than the time taken to discriminate a user input (inherent in column 10 lines and column 12 line 56 to column 13 line 19, where the discriminating process takes a certain time period and comparison).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrus et al. (US Patent#5410305) in view of Wright (US Patent#6912605).

Regarding claim 4, Barrus et al. teach the limitation of claim 1.

But, Barrus et al. do not expressly disclose the second mode is a low power radio communication mode.

Wright teaches a wireless keyboard having a second mode in a low power radio communication mode (column 5 lines 43-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the wireless mode taught by Wright into the device of Barrus et al., in order to provide convenient wireless connection.

Regarding claim 9, Barrus et al. teach the limitation of claim 1.

But, Barrus et al. do not expressly disclose further comprising low power radio transceiver means and wherein the exit from the first mode is initiated by sending a message using the low power radio transceiver means.

Wright teaches a wireless keyboard comprising low power radio transceiver means (inherent in wireless keyboard) and wherein the exit from the first mode is initiated by sending a message using the low power radio transceiver means (column 5 lines 40-50).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the wireless mode taught by Wright into the device of Barrus et al., in order to provide convenient wireless connection.

Regarding claim 10, Barrus et al. teach the limitation of claim 1.

Barrus et al. also teach transmitting data (column 10 lines 42-57).

But, Barrus et al. do not expressly disclose further comprising low power radio transceiver means wherein the first function comprises transmitting data using the low power radio transceiver means.

Wright teaches a wireless keyboard comprising low power radio transceiver means wherein the first function comprises transmitting data using the low power radio transceiver means (column 5 lines 40-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the wireless mode taught by Wright into the device of Barrus et al., in order to provide convenient wireless connection.

5. Claims 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrus et al. (US Patent#5410305) in view of Kammer et al. (US Patent#6950645).

Regarding claim 11, Barrus et al. teach the limitation of claim 1.

But, Barrus et al. do not expressly disclose operating as a Slave in a Bluetooth piconet.

Kammer et al. teach a wireless keyboard operating as a slave in Bluetooth piconet (column 6 line 62 to column 7 line 24).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a wireless keyboard operating as a slave in Bluetooth piconet taught by Kammer et al. into the touch-entry user input device of Barrus et al., in order to provide personal wireless connection.

Regarding claim 12, Barrus et al. teach the limitation of claim 1.

But, Barrus et al. do not expressly disclose operating in accordance with the Bluetooth Standard wherein the first mode is the Sniff Mode or Park Mode.

Kammer et al. teach operating in accordance with the Bluetooth Standard wherein the first mode is the Sniff Mode or Park Mode (column 8 lines 4-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a wireless keyboard operating in Bluetooth Standard wherein the first mode is the Sniff Mode or Park Mode taught by Kammer et al. into the touch-entry user input device of Barrus et al., in order to have power saving mode with wireless connection.

Regarding claim 13, Barrus et al. and Kammer et al. teach the limitation of claim 12.

Kammer et al. further teach the exit from the Sniff Mode is initiated by transmitting a LMP_unsniff_req message (inherent in column 8 lines 4-19).

Regarding claim 14, Barrus et al. and Kammer et al. teach the limitation of claim 12.

Kammer et al. further teach the exit from the Park Mode is initiated by transmitting a LMP_accepted message (inherent in column 8 lines 4-19).

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Regarding claim 15, Barrus et al. teach the limitation of claim 1.

But, Barrus et al. do not expressly disclose operating in accordance with the Bluetooth Standard wherein the second mode is the Active Mode.

Kammer et al. teach having wireless devices operating in accordance with the Bluetooth Standard wherein the second mode is the Active Mode (discoverable mode, column 7 lines 9-19, column 12 line 59 to column 13 line 35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Bluetooth wireless usage taught by Kammer et al. into the device of Barrus et al., in order to provide personal wireless connection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zhiyu Lu whose telephone number is (571) 272-2837. The examiner can normally be reached on Weekdays: 9AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vuong Quochien can be reached on (571) 272-7902. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

zl
Zhiyu Lu
January 9, 2007


NAY MAUNG
SUPERVISORY PATENT EXAMINER